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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,524	07/22/2003	Hideo Sato	240585US6	5818
22850	7590	07/17/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			STREGE, JOHN B	
ART UNIT		PAPER NUMBER		
2624				
NOTIFICATION DATE		DELIVERY MODE		
07/17/2007		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/623,524	SATO, HIDEO	
	Examiner John B. Strege	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 April 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-9 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

***Response to Amendment/Arguments***

1. The amendment received 4/13/07 has been entered in full. Applicant's arguments filed 4/13/07 regarding claims 1-7 have been fully considered but they are not persuasive. Specifically the Applicant argues that Itsumi does not teach or suggest that the resistance of the epidermis in a second skin area becomes substantially zero when an electric potential is generated between the first and second electrodes. To argue this the Applicant points to figure 4 and states that the only point where it reaches zero is where the voltage is zero. However, the Examiner does not agree with the Applicants arguments. Specifically what is claimed is that the resistance becomes substantially zero, thus considering that the voltage is shown and that resistance is equal to the voltage divided by the current, then it will be seen that the value at the first joint will take on a very small resistance value. Furthermore Itsumi discloses that the greater the amount of the protruding portion entering between the electrodes becomes, the lower the resistance  $R_i$  becomes (col. 6 lines 56-59). Thus as the amount of the protruding portion entering gets higher the value of the resistance will approach zero which reads on being substantially zero.

Applicant's arguments with respect to claims 8-9 have been considered but are moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, and 5-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Itsumi et al. (hereinafter "Itsumi").

Itsumi discloses a personal authentication system (col. 1 lines 5-15) comprising: a first electrode that is disposed in a first skin area of a person to be authenticated (see numeral 142 of figure 2B); a second electrode that is disposed in a second skin area apart from the first skin area (see numeral 142 of figure 2B representing multiple electrodes), the contact surface between the second electrode and the second skin area having a predetermined area such that the resistance of the epidermis in the second skin area becomes substantially zero when an electric potential is generated between the first electrode and the second electrode (see figure 4, voltage is equal to the current (which is constant) multiplied by the resistance, thus the graph shown is proportional to the resistance graph by position, furthermore see col. 3 lines 15-25, and col. 6 lines 9-59); a measuring unit for measuring the resistance distribution of the epidermis in the first skin area based on a predetermined voltage that is applied between the first electrode and the second electrode and a current flowing between the first electrode and the second electrode through the body, including the skin, of the person to be authenticated (col. 3 lines 15-30); and an authentication unit that stores the resistance distribution data, which is measured in advance, of the epidermis in the first skin area of a validated person, for comparing the resistance distribution data of the epidermis in the first skin area of the person to be authenticated, the resistance

distribution being measured with the measuring unit, with at least part of the stored resistance distribution data of the epidermis of the validated person to validate the person to be authenticated (col. 3 lines 15-30).

Regarding claim 2, as seen in figure 4 there are areas of the finger where the resistance doesn't substantially vary.

Regarding claim 3, the distance between the first electrode and the second electrode is longer than a distance in a case in which electrical leakage begins to occur between the first electrode and the second electrode through skin upon generation of an electric potential between the first electrode and the second electrode (col. 6 lines 9-59).

Regarding claim 5, the electrodes 142 seen in figure 2B are two-dimensional.

Regarding claim 6, the electrodes 142 seen in figure 2B are plane electrodes.

Claim 7 is similarly analyzed to claim 1.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by Brooks USPN 6,898,299.

Regarding claim 8 Brooks discloses a personal authentication system (col. 1 lines 14-22) comprising: a first electrode that is disposed in a first skin area of a person to be authenticated (see figure 9); a second electrode that is disposed in a second skin area apart from the first skin area and has a sufficiently larger area than the first electrode (see figure 9);

a measuring unit for measuring the resistance distribution of the epidermis in the first skin area based on a predetermined voltage that is applied between the first electrode and the second electrode and a current flowing between the first electrode and the second electrode through the body, including the skin, of the person to be authenticated (col. 13 lines 13-23, col. 15 lines 51-67); and

an authentication unit for comparing the measured resistance distribution with at least part of the resistance distribution data of the epidermis of a validated person, who is registered in advance, to validate the person to be authenticated (col. 17 lines 19-23).

Regarding claim 9, as seen in figure 9 the second electrode is a plane electrode.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Itsumi".

As discussed above Itsumi discloses all of the limitation of claim 1 and measures the resistance distribution of the epidermis to identify the positions in the finger of the person to be authenticated based on the resistance distribution near the joints of the finger (see figure 2B and col. 6 lines 9-59). Itsumi does not explicitly disclose using a plurality of fingers, however it is well known to use multiple fingers in order to increase the security of a system thus the examiner declares official notice. At the time of the invention it would have been obvious to one of ordinary skill in the art to use multiple fingers with the motivation being to enhance the security of the system.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Strege whose telephone number is (571) 272-7457. The examiner can normally be reached on Monday-Friday between the hours of 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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